



Forest Health Protection Pacific Southwest Region



Date: December 18, 2012

To: Sharon Heywood, Forest Supervisor, Shasta-Trinity National Forest

Subject: Tanoak mortality near Trinity County (FHP Report N13-01)

This report is for your information- no response is requested at this time.

Background: Since its introduction into California in the mid-1990's, *Phytophthora ramorum*, the pathogen responsible for Sudden Oak Death, has spread north to Humboldt county and south to Monterey county. An additional infestation area is present in southern Curry county, Oregon, near the California state line. To date, the pathogen has not been found in any National Forests. However, wet springtime conditions over the last two years have been highly conducive to pathogen spread. Although tanoak and several species of red oaks are killed by *P. ramorum*, well over 100 plants have been identified as non-lethal hosts for the pathogen. Annual aerial survey flights and a stream baiting detection network provide for early detection of the pathogen. When the pathogen is confirmed in a new county, quarantine regulations are implemented throughout the affected county. These regulations have a wide range of impacts on many industries that ship or move plants, plant parts, green waste or soil. A summary of the regulations is in the attached Appendix.

New Developments: Last week, I was informed that the 2012 Forest Health Protection (FHP) aerial survey flight identified tanoak mortality consistent with Sudden Oak Death in the Hoover Creek drainage in Humboldt county, approximately 1-1/4-mile west of the Six Rivers National Forest and approximately 1-3/4-miles west of Trinity County (Figure 1). Efforts are underway to confirm whether this mortality is due to *P. ramorum*. Additional areas of tanoak mortality have been identified, and *P. ramorum* confirmed, in the Larabee Creek drainage, approximately 7 miles northwest of the Hoover Creek mortality, approximately 4 miles west of the Six Rivers NF and 7 miles west of the Trinity County line (Figure 2).

Take-Home Message: Given the ability of *P. ramorum* to spread aurally by wind-borne spores for up to 2-3 miles, it is highly likely that *P. ramorum* will soon be identified on the Six Rivers National Forest and in Trinity County. Discussions on how to address the situation have commenced between USFS Forest Health Protection, PSW Station Research, UC Cooperative Extension, the California Oak Mortality Task Force, and Six Rivers NF and BLM personnel. Containment of the pathogen is difficult, and involves the removal of oak and tanoak, California bay laurel and other host species within affected areas and surrounding buffer zones. This is typically done by a combination of cutting, herbicide application and controlled burning.

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While it is likely too warm and dry for the pathogen to spread as far east as the Shasta-Trinity National Forest, confirmation of the pathogen in Trinity County and the resulting establishment of county-wide quarantine regulations would affect operations on the Shasta-Trinity in a variety of ways. At the very least, compliance agreements would have to be established with CDFA and/or APHIS before regulated articles, including certain kinds of untreated logs, firewood and nursery stock, could be moved out of the state or county. However, if a reasonably aggressive and coordinated containment effort is launched, it is possible that CDFA and APHIS could agree to limit the quarantine to a specific portion of Trinity County, as was done in Curry County in Oregon.

If you have any questions, please let me know. As always, I'll do my best to keep you informed of new developments as they occur.

/s/ Pete Angwin

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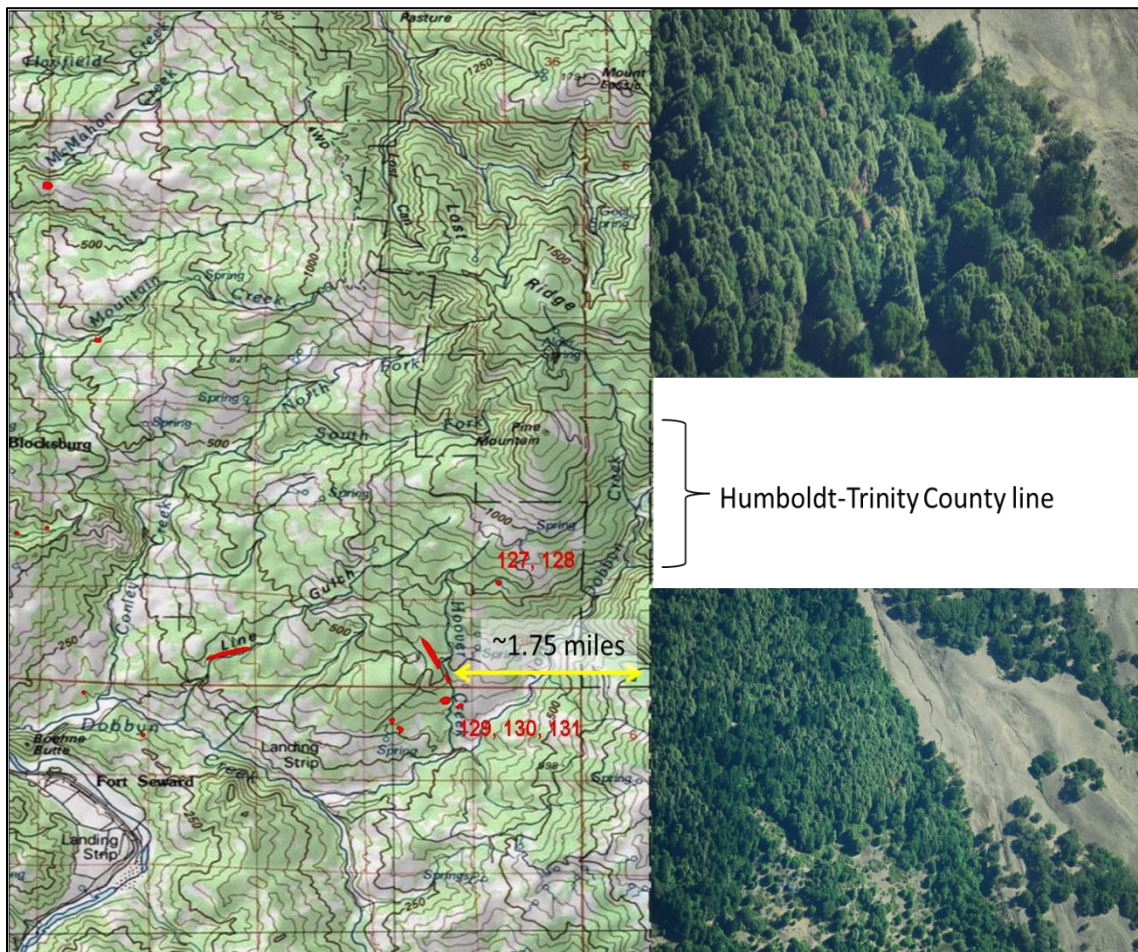


Figure 1. Tanoak mortality identified by air in 2012 in the Hoover Creek drainage in Humboldt County near Trinity County and the Mad River Ranger District, Six Rivers National Forest.

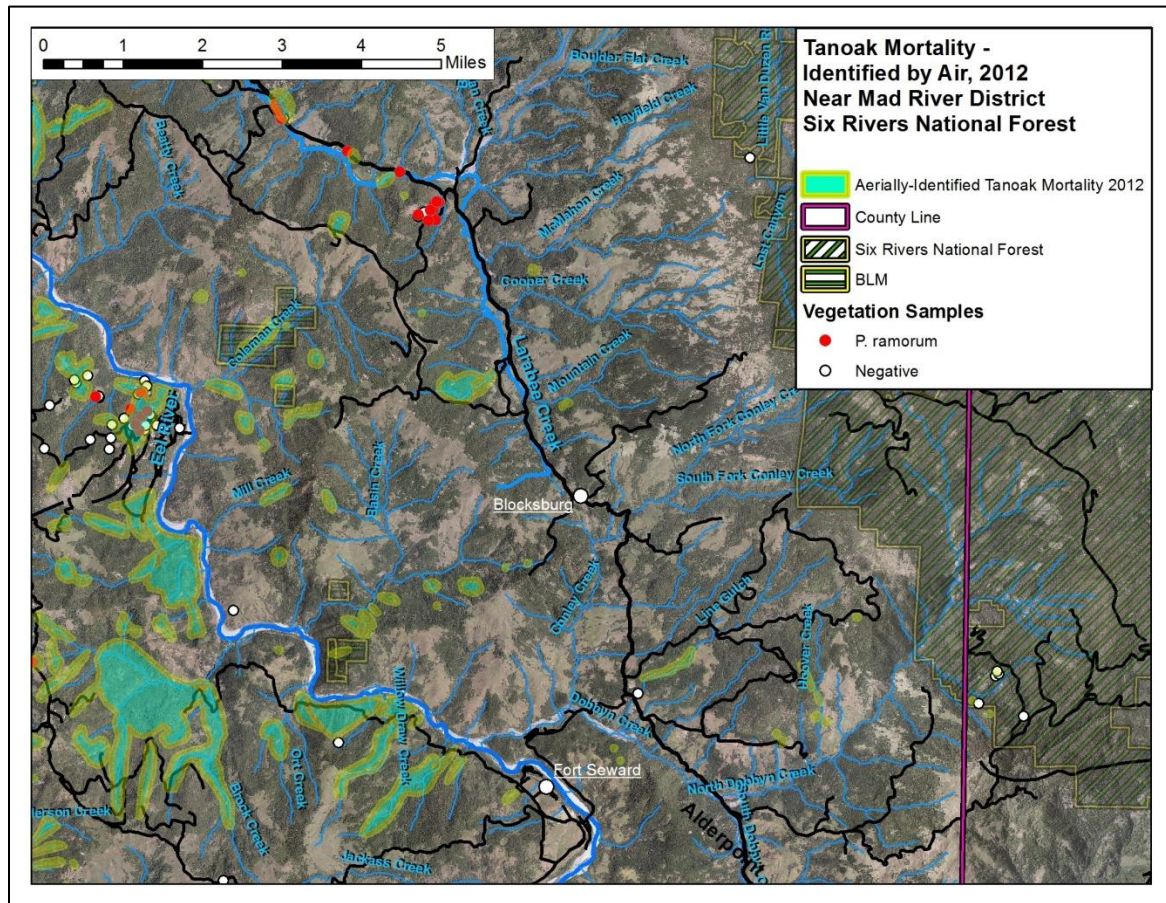


Figure 2. Tanoak mortality identified by air in Humboldt County in 2012 near Trinity County and the Mad River Ranger District, Six Rivers National Forest. The Larabee Creek infestation (confirmed *P. ramorum*) is indicated by the red dots near the top of the map.